

WHAT is claimed is:

- Sub C1
1. A spread illuminating apparatus, wherein a square transparent substrate is provided close to the surface of a liquid crystal panel, and a plurality of straight groove portions are formed on the surface of said transparent substrate intersecting one another obliquely with respect to the four sides of said transparent substrate.
 2. ~~A spread illuminating apparatus in which a square transparent substrate is provided close to the surface of a liquid crystal panel and said liquid crystal panel is illuminated through said transparent substrate by a bar-like light source which is provided parallel with the side surface of said transparent substrate, wherein a plurality of straight groove portions are formed on the surface of said transparent substrate intersecting one another obliquely with respect to the four sides of said transparent substrate.~~
 - a 3. A spread illuminating apparatus according to claim 1 or 2, wherein said groove portions are substantially triangular in cross section.
 - a 4. A spread illuminating apparatus according to claim 1 or 2, wherein the interval between said groove portions is decreased as the distance from said bar-like light source increases.
 - a 5. A spread illuminating apparatus according to claim 1 or 2, wherein the depth of said groove portions is increased as the distance from said bar-like light source increases.
 - a 6. A spread illuminating apparatus according to claim 1 or 2, wherein an angle defined between each of said groove portions and the side of said transparent substrate opposing said bar-like light source is in the range of 10 to 45 degrees.
 - a 7. A spread illuminating apparatus according to claim 1 or 2, wherein said bar-like light source comprises a bar-like fluorescent tube.
 - a 8. A spread illuminating apparatus according to claim 1 or 2, wherein said bar-like light source includes a bar-like transparent light conductive member and a light emitting diode which is provided at the end portion of said bar-like transparent light conductive member.